

BOOK NOTICES

TOD F. STUESSY, VERONIKA MAYER, and ELVIRA HÖRANDL (eds). 2003. **Deep Morphology: Toward a Renaissance of Morphology in Plant Systematics**. (ISBN 3-906166-07-4, hbk.). Regnum Vegetabile: Vol. 141. Gantner Verlag, Liechtenstein. (**Orders:** Koeltz Scientific Books, D-61453 Koenigstein, P.O. Box 1360, Germany; koeltz@t-online.de; www.koeltz.com). \$156.00, 326 pages, illus. ca. illus., 6 1/4" × 9 1/4".

After an introduction (Chapter 1), the chapters are divided into three sections: (2–5) Genetics and Development, (6–8) Phylogenetic Analysis, (9–13) Ecology and Adaptation, with a final overview (Chapter 14).

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1. What is morphology and why is it time for its renaissance in plant systematics? (Weber).
2. The genetic dissection of the stepwise evolution of morphological characters (Bachmann and Gailing).
3. Architectural effects on floral form and function: a review (Diggle).
4. Floral developmental features and molecular data in plant systematics (Leins and Erbar).
5. Comparative morphology in relation to molecular and phylogenetic systematics (Gleissberg).
6. Homology and character evolution. (Williams and Humphries).
7. What should a "complete" morphological phylogenetic analysis entail? (Endress).
8. Beyond morphoclines and trends: the elements of diversity and the phylogenetic patterning of morphology (Hufford and McMahon).
9. Epicuticular waxes and vascular plant systematics: integrating micromorphological and chemical data (Barthlott, Theisen, Borsch and Neinhuis).
10. Toward a deeper understanding of sporoderm structure and function in pollen grains: the sporoderm (Hesse).
11. Ecological adaptations and deep phylogenetic splits—evidence and questions from the secondary xylem (Baas, Jansen and Wheeler).
12. The potential of plant biomechanics in functional biology and systematics (Speck, Rowe, Civeyrel, Claßen- Bockhoff, Neinhuis, and Spatz).
13. How a better understanding of adaptations can yield better use of morphology in plant systematics: toward Eco-Evo-Devo (Givnish).
14. Morphological data in plant systematics (Stuessy).

STEVEN R. RADOSEVICH, JODIE S. HOLT, and CLAUDIO M. GHERSA. 2007. **Ecology of Weeds and Invasive Plants: Relationship to Agriculture and Natural Resource Management (ed. 3)**. (ISBN 978-0-471-76779-4, hbk.). John Wiley & Sons Inc., One Wiley Drive, Somerset, NJ 08875, U.S.A. (**Orders:** www.wiley.com, 877-762-2974, 1-800-597-3299 fax). \$74.95, 454 pp., b/w photos, line drawings, 6 1/4" × 9 1/4".

Table of Contents

1. Weeds and Invasive Plants (definitions and classification systems; in production systems and wildlands).
2. Principles of Weed and Invasive Plant Ecology.
3. Invasibility of Agricultural and Natural Ecosystems.
4. Evolution of Weeds and Invasive Plants.
5. Weed Demography and Population Dynamics.
6. Plant-Plant Associations.
7. Weed and Invasive Plant Management Approaches, Methods and Tools.
8. Herbicides.
9. Systems Approaches for Weed and Invasive Plant Management.